US005500937A

United States Patent [19]

Thompson-Rohrlich

[11] Patent Number: 5,500,937

[45] Date of Patent: Mar. 19, 1996

[54] **METHOD AND APPARATUS FOR EDITING AN INKED OBJECT WHILE SIMULTANEOUSLY DISPLAYING ITS RECOGNIZED OBJECT**

[75] Inventor: **John Thompson-Rohrlich**, Santa Fe, N.M.

[73] Assignee: **Apple Computer, Inc.**, Cupertino, Calif.

[21] Appl. No.: **118,034**

[22] Filed: **Sep. 8, 1993**

[51] **Int. Cl.**[6] **G06F 3/00**

[52] **U.S. Cl.** **395/161**; 395/155; 395/144; 395/153; 345/173; 382/309; 382/311

[58] **Field of Search** 382/309–311, 189; 395/155–161, 144–149, 153; 345/117–120, 173–183, 187; 364/560

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,727,588	2/1988	Fox et al.	382/189
4,974,260	11/1990	Rudak	382/311
5,151,688	9/1992	Tanaka et al.	345/182
5,239,489	8/1993	Russell	364/560
5,315,667	5/1994	Fujisaki et al.	382/187
5,428,805	6/1995	Morgan	345/179 X

OTHER PUBLICATIONS

"Guide to Pen Computing", Microsoft Corp., 1992.

"Using PenPoint" Developer Release Operators Manual for PenPoint Operating System, Go Corporation.

Primary Examiner—Mark R. Powell

Assistant Examiner—John E. Breene

Attorney, Agent, or Firm—Hickman & Beyer

[57] **ABSTRACT**

A method and apparatus for manipulating inked objects in a computer system includes the steps of displaying a first recognized object on a computer screen and displaying a first ink object on the screen which was previously recognized as the first recognized object. The first ink object is edited to create a second ink object, and the second ink object is recognized as a second recognized object. The first recognized object is then replaced with the second recognized object. The method also preferably includes a step of selecting the first recognized object, and the first ink object is displayed in response to the selection step. A preferred method of selecting the first recognized object is to move a stylus within a predetermined distance or bounding box of the first recognized object. Editing the first ink object preferably includes adding or deleting a portion of the ink object, inserting a space between characters of the ink object, replacing a portion of the ink object, and adding new ink to the ink object. Alternate embodiments include moving the recognized object to different locations on the screen in relation to the first ink object, and determining in advance if the path of the stylus in moving toward the bounding box of the recognized object. The method and apparatus of the present invention permits convenient and quick manipulation of inked objects and correction of recognized objects displayed on a pen computer system.

32 Claims, 12 Drawing Sheets